surements but also for those reading and evaluating the data of others.

For those directly or indirectly active in plant-water relations, this volume will be useful as a current guide to research and a reference for years to come.

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## Landform Studies from Space

Geomorphology from Space. A Global Overview of Regional Landforms. NICHOLAS M. SHORT and ROBERT W. BLAIR, JR., Eds. National Aeronautics and Space Administration, Washington, DC, 1986 (available from Government Printing Office, Washington, DC). xx, 717 pp., illus. \$41. NASA Special Publication 486.

This atlas of images of earth from space has as its core 237 "plates," each of which consists of a space image (some occupying two pages) with three or four informative and enhancing aerial and ground photographs. Commentaries, or extended captions, draw attention to information contained in the primary images. The texts are generally excellent and germane to the

plates. The space images are dominantly Landsat black-and-white, but there are some color composites as well as photographs taken by astronauts with hand-held cameras. A few radar and thermal images are also used. Image reproduction is of excellent quality throughout.

The book contains 12 chapters by various authorities on geomorphology. A general introduction on regional landforms analysis is followed by nine thematic groups of plates, each with a brief introduction on that type of landform. Victor Baker argues for a return to research in regional landforms analysis using the new imagery, and Everett, Morisawa, and Short emphasize tectonic studies utilizing regional landforms as a main data source. Discussions of volcanic, fluvial, deltaic, coastal, karst, eolian, glacial, and planetary landforms follow, all utilizing a regional approach made possible by satellite and aerial views. The classical drainage patterns (dendritic, trellis, and so forth) take on a spectacular regional aspect when viewed on large-area, small-scale images.

The remaining two chapters, by Robert S. Hayden and others, treat geomorphological mapping and global geomorphology. Wellestablished methods of geomorphological mapping are easily adapted to regional studies and could lead to new understanding of climatically controlled processes and terrain sensitivity, for example. In the chapter on global geomorphology, the importance of including the physiography of the sea floor in regional studies is brought out, and some directions for new research, in the form of questions, are given.

The book concludes with two appendixes, one dealing with remote sensing principles applied to space imagery, the other giving sources of the illustrations and data. A useful index completes the volume.

No radical or new concepts are developed, but the book emphasizes a new perspective for landform studies. It is clearly the editors' and authors' hope that this emphasis on regional analysis will lead to new ideas and perhaps revitalize the physiographic studies now generally fallen into disfavor in geomorphology.

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"This Landsat-2 view shows the northern end of the Gulf of California where the Colorado River passes into Mexico and forms a prominent delta at its mouth. The Sierra de Juárez, in Baja California (lower left), exemplifies tectonic landforms. Star, linear, and crescentic dunes are evident in the sand sheets that make up the Gran Desierto of the Sonoran Desert of Northwest Mexico." [From Geomorphology from Space]

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